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2 Abstract of the Disclosure
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4 A timing recovery loop includes a random walk filter
5 counter for counting early, nominal and late arrivals of data
6 transitions pulses of an input baseband signal waveform
7 encoding a digital bit stream, and provides magnitude counts
8 that are compared to a threshold value that when exceeded by
9 the magnitude counts results in a delay adjustment of the
10 generated adjusted timing pulses then remaining synchronized
11 with the actual bit timing for maintaining bit timing lock. The
12 adjusted timing pulses can then be used by a data detector for
13 reliable data detection and reconstruction of the digital bit
14 stream. The threshold value can be adaptively adjusted for
15 reducing drop lock rates in the presence of changing channel
16 environments.
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